

OLDEST BEE PAPER
IN AMERICA

THE AMERICAN BEE JOURNAL

ESTABLISHED
IN 1861

DEVOTED TO SCIENTIFIC BEE-CULTURE AND THE PRODUCTION AND SALE OF PURE HONEY.

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The National Convention.

It is now quite time for all who can possibly attend the meeting of the National Society at Lexington, on Oct. 5-7, to make their arrangements to do so. As previously announced, the editor of the BEE JOURNAL has an engagement for that time elsewhere, and it seems to be almost impossible to break that engagement, so as to be able to attend the meeting at Lexington. By the urgent solicitation of many of our friends we have endeavored to make arrangements by which we may be able to attend this important national meeting on the second and third days of its session—October 6th and 7th.

If it is possible to so arrange matters we shall be there, for our heart and soul are engaged in the work of furthering the interests of American apiculture, and to miss this Convention would be quite a sore disappointment to us.

Mrs. L. Harrison, in the *Prairie Farmer*, very aptly remarks: "It will pay bee keepers to attend this swarming of their fellows—pay in pleasure and in profit. May the 'swarming fever,' which is so hard to control, be contagious all over the country, until the largest swarm is there congregated which was ever known. And when the discussions are over, we will hold an impromptu meeting in the annex Mammoth Cave."

More Good Words for Sweet Clover.

The *Indiana Farmer*, which early came to our support in advocating the practicability of planting for honey, and recognized the superiority of melilot or sweet clover, has the following in reference to this season's experience with it:

From Mr. Wm. Schofield, an old veteran bee-keeper residing a few miles northeast of the city, we have the following satisfactory report in reference to our favorite honey plant, melilot. Uncle Billy, as he is familiarly known, has about two acres sown to melilot. He says it made a prodigious growth early in the season, but on account of the excessively dry weather matured its seed very early. It had almost quit blooming, when he turned the cattle on it. They soon had all the tops eaten off, and much of it was cut almost to the ground. Soon after the cattle were removed, when the melilot seemed to take a second growth, throwing out new shoots, and blooming as profusely as early in the season. As an experiment, he tried cutting back a part of it, and reports the result very favorable, as, after being cut, the plants throw out many more branches, besides growing tall and compact. He thinks if he had had a few more acres it would have paid better than anything else on the farm.

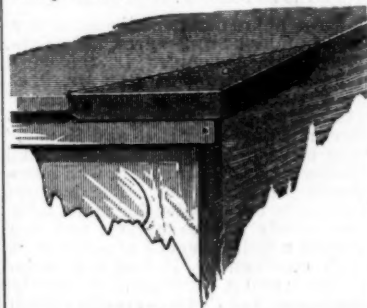
Now is the proper time to make preparations for planting melilot. Procure your seed at once from some reliable dealer, so as to feel assured of their freshness; then select the waste places that are now obnoxious to the sight because of weeds, or some portion of the farm where nothing else will grow to advantage. If no waste places exist, then set apart good soil for it, as it will much more than repay ground-rent. Prepare your ground as for clover, and lightly harrow in the seed this fall. Fall planting is much the best, as it insures a more uniform germination. If desirable, sow wheat with it; or, if bloom is wanted next season, sow cleome with it, or in the spring harrow in with it mammoth mignonette.

At the Chicago Fair, held Sept. 13-17, Mr. R. A. Burnett, Commission Merchant of 165 South Water Street, had a very creditable display of both comb and extracted honey. He deserves credit at the hands of bee-keepers for his efforts in popularizing pure honey in our market. We are sorry to be obliged to say that owing to poor management, the exhibition of bees and apiarian implements was not what it might and should have been, had bee-keepers been given ample time and notice to prepare for it.

We hope another season the apicultural department will be one of the most attractive features connected with the Chicago Fair.

Metal Corners for Crate Covers.

From Mr. W. H. Fletcher, of Sauk Rapids, Minn., we have received a very simple little contrivance for attaching to the corners of crate covers. These can be made of tin, require no especial ingenuity to manufacture, are easily tacked on the corners of the



covers, and will be found very convenient by the grocer or family to hold the cover exactly in place, thereby effectually excluding flies and bees from the honey. The above cut illustrates a section of the cover with the tin corner attached.

Arkansas State Fair.—We have received from Dr. W. W. Hippolite, of Devall's Bluff, Ark., the premium list of the Arkansas State Fair, to be held at Little Rock, Oct. 17-22, 1881. In the honey department, we find the following list of premiums, entrance free:

- Best package comb honey, in the best marketable shape, 5 lbs. or more, \$5.00
- Best package of extracted honey, in the most marketable shape, 5 lbs. or more, \$5.00
- Best crate of honey in the comb, in the most marketable shape, 25 lbs. or more, \$10.00
- Best colony of bees in movable comb hives, including their public manipulation, \$10.00
- Best 5 lbs. beeswax, \$2.00
- Best machine for extracting honey, \$2.00
- Best display of bee-keepers' supplies, Diploma.

An inventive genius in Kentucky says he is perfecting machinery to make rolls for foundation machines. If he succeeds, it will greatly lessen the labor of making, and therefore make the price much less for first class comb foundation mills. He promises to have one on exhibition at the National Convention at Lexington.

Cook's Manual of the Apiary.

The sixth edition (eighth thousand) of this popular bee-keepers' handbook is now ready. As the lengthened evenings of winter approach, every reading, thinking agriculturist makes out his schedule of text-books to be purchased for pleasurable and profitable study, with which to educate himself and family; and whether it be the intention to keep a few colonies only for recreation and family use, or a larger number for profit, this book will be found invaluable. In fact, no scientific or rural library is complete without it, and no education is finished until it has been carefully and thoughtfully perused. In order to extend its circulation, and as an inducement to bee-keepers to assist in doing so, the price will be reduced to \$10.00 per dozen, bound in cloth, by express to one address. This is a liberal reduction on the retail price (\$1.25), making a saving of nearly 50 per cent. The last edition has been carefully revised, and contains the results of Professor Cook's latest scientific investigations and discoveries.

We are always glad to have articles copied from the BEE JOURNAL into other publications, but we must insist that the only honorable way is to give the BEE JOURNAL due credit for them. Several such are going the rounds that were stolen from our columns by some enterprising (?) paper, which are now credited to the thieving concern, and they look incomprehensible to some, as they refer to other articles in the BEE JOURNAL or its apiary, etc. The "New England Bee Journal" gives an article as original that was written by Mr. Chas. Dadant, and may be found on page 81 of the BEE JOURNAL for March 16, 1881. The original manuscript is now on file in this office. We know, of course, the failure to give us credit for the article was an oversight, but such omissions look badly during the first month of that paper's existence.

Honey in the Eastern Markets.—It will be observed, by reference to our market reports, that Messrs. Crocker & Blake, of Boston, report that honey sells quite freely in one-comb boxes, and add: "A large quantity could be sold in our market at from 20 to 22c., according to quality." Every day furnishes fresh evidence that honey is a favorite with the public, and meets with a ready sale at good prices.

St. Joseph, Mo., Bee and Honey Show.

Many of our readers are aware that the aim of the BEE JOURNAL has been to make honey a staple product. To this end we have endeavored to popularize the consumption of honey by the masses, as well as to raise the standard of production, by applying correct principles and progressive art to the management of the apiary. We have labored earnestly for this end, and now we begin to realize the results.

Bees and honey are already the great attraction at such fairs as have given prominence to this industry—and this will become more apparent each successive year. We were impressed with this idea at the St. Joseph Exposition. The officers of that association informed us that they were surprised at the result of their experiment in encouraging the apiarian department this year, and intended next year to give it far more prominence; they had realized the fact that it formed the greatest attraction presented by the Exposition. To the Superintendent of the Apiarian Department, R. S. Musser, Esq., an energetic and prominent lawyer of St. Joseph, and his faithful ally, Mr. D. G. Parker, as well as the Judges, Messrs. John Bays, J. A. Matney and S. P. Hyde, may be attributed the grand success of the Bee and Honey Show.

By particular request of the managers we gave a lecture on Bees and Honey at the Court House, on Thursday evening. The managing editor of the *Gazette*, a morning paper of that city, was present, as well as its reporter. The editor of the *Gazette* gave his views of the subject in the following article:

Few things last week, which brought us so many pleasant and profitable things, combined pleasure and profit to such an extent as the display of honey made at the fair and the lecture of Mr. Newman, of Chicago, on "Bees and Honey." The culture of bees is in its very infancy in this region. Until this year, there has been no noticeable display of honey at our fairs. The attention that was given to the subject this year marks a new era. The display attracted very great attention. Through the energy of the management of the apiary department, good prizes were offered and awarded. The bee-keepers of the region were encouraged and a more general interest was aroused in the subject. In fact, from this time the culture of the bee in Northwest Missouri seems likely to go steadily forward.

It is a great industry. How great, only the few that are interested in it have any idea. It has never been extensively enough attended to in this immediate region to have brought any great profit. But there is money in it. And, besides the profit, there is a vast deal of pleasure. The management and manipulation of bees is such delicate work that many ladies have become distinguished apiarists. In fact, the business is capable of such extension and yields so much profit and pleasure that it may open a new field for ladies' employment. The accomplishments of Mrs. R. S. Musser of this city in this direction should stimulate many other ladies to engage in it. Such delicious food, in fact, should properly be brought to our tables by our ladies' care; it is altogether fitting.

Those who had the pleasure of hearing Mr. Newman's lecture on "Bees and Honey," cannot fail to have new enthusiasm. To the unlearned, it was a revelation of the secrets of a great and mysterious industry. Im-

provement has followed improvement at such a rate in the structure of hives and in the instruments used in the manipulation of bees and in gathering the honey, that the apiary is as complete as a factory wherein man's ingenuity does the work. The secrets of the hive have been laid bare and the little workers are made subject to the apiarist's absolute management.

So profitable can the business be made that it is profitable to plant bloom for the little honey-workers. To grow honey is as profitable as to grow butter or lard. But the time when we in this region will find it necessary to plant for our bees is yet distant. There is honey-bearing bloom enough that grows by our streams and in our fields to supply every table in Missouri.

It was a gratifying thing to hear so good authority as Mr. Newman declare that, whatever else may be adulterated, the bees cannot be fooled with glucose. If honey be in reach, they will never store any thing else in their mystic cells.

Let us all catch the enthusiasm. A few colonies of bees are cheap. They yield a delicious income. We trust that our local society of bee-keepers will keep up the enthusiasm; and, in a few years, we may count honey among our great products. We have as good a chance as any people in the world.

The synopsis of our lecture as given in the *Daily Herald* may be found on page 301. The reporter of the *Gazette* remarks as follows:

"An appreciative audience of several hundred bee-keepers, ladies and gentlemen, assembled in the court house last evening to hear Mr. T. G. Newman, of Chicago, the editor of the AMERICAN BEE JOURNAL, deliver a lecture on 'Bees and Honey.' The meeting was called to order, and Mayor Piner, as chairman, who introduced Mr. Newman. The lecturer has made both a scientific and a practical study of the apiary, and has earned a well-deserved reputation on both continents. It was a peculiar pleasure and a great privilege for the bee-keepers of this community to hear him. He is a pleasant gentleman, easy in his address and has an interesting manner in speaking. He was enthusiastically received; and all that had the pleasure of hearing him will not soon forget the occasion. He briefly stated the rise and progress of bee-culture and exhibited the most important inventions that have been made for the bee-keepers' assistance. The lecture was very practical and contained many hints that are invaluable. But practical as it was, the pleasure of the apiary as well as the profit was told; for Mr. Newman is an enthusiast, 'as,' to use his own words, 'all bee-keepers are.' His visit to St. Joseph is highly appreciated and will long be remembered. The vast benefit and endless pleasure that will ultimately be derived from the study of this subject and the profit of the industry by our people, will always most pleasantly recall Mr. Newman's services in adding to their enthusiasm in telling of improved management of bees, etc."

☞ We have received a queen from Mr. D. A. Jones for trial and comparison in the BEE JOURNAL apiary, but the season is so far advanced it will be impossible to express any opinion this fall, except upon the appearance of the bees, when she has ample time to rear them. The queen is smaller than the average Italian, but was very lively, and cheerfully received in the nucleus to which we introduced her.

Badges.—Bee-keepers going to fairs should wear a badge with a gold bee on it. It will serve to introduce him to other bee men. We will send them for 10 cents, post paid.



MISCELLANEOUS.

Ligurian Honey Bees.—In the *Rural New Yorker* Mr. G. M. Doolittle says:

In the *Rural*, we read, under the above heading, that "a year or two since many of our apiarists were quite enthusiastic in regard to the merits of Ligurian honey bees, as it was claimed that they were more industrious than either the common bee or the Italians," etc. This, I believe, was taken from the *New York Sun*. As it conveys a wrong impression I wish to say that Liguria is simply a province in Italy, and therefore Ligurian bees and Italians are one and the same thing. The correspondent of the *Sun* farther states, giving Mr. Taylor's book as his authority, that these bees gather more honey by robbing the hives of common bees. This is contrary to the testimony of all practical apiarists (not apiarists as the correspondent of the *New York Sun* would have it). Practical experience in the apiary shows that the Italians are not as likely to rob as the blacks or hybrids, while they will defend their stores as long as there is a handful of them left. That they will gather more honey is a fact, and their chief value is their perseverance, in a poor honey season, in toiling on day after day for the little honey they can obtain, while the common bees seem to think that little is not worthy of notice. To illustrate:—In 1872, at the close of the season for basswood blossoms, from which our main honey crop is obtained, we did not have a single box of honey finished. At this time we had both Italian and common, or black bees. Soon the seed crop of red clover commenced to bloom, on which the Italians went to work at once, but not a black bee was to be seen. As a consequence we took from some of our Italian colonies 60 pounds of box honey, while the black bees had eaten up half their stores from the basswood and had to be fed for winter. After this we were not slow in introducing Italian queens to all our stock.

Effects of Adulterations.—The *Farmers' Review*, speaking of oleomargarine, says:

Oleomargarine has a new load to bear. Last week a whole family were poisoned by its use, though not fatally, and 4 laboring men suffered from the same cause. The malady takes a similar form to the lard-butter cholera, prevalent in Chicago last winter.

Bee Forage and Bee-Keeping.—The *Farm and Garden*, a new and sprightly monthly, issued at Philadelphia, Pa., is on our table, and is welcome as an exchange. In it Dr. J. P. H. Brown, Augusta, Ga., thus answers the following questions:

Is bee-keeping profitable? It is when properly attended to; and pays a larger dividend upon the capital than almost any other of the rural industries. Even in those localities where there are poor markets for honey, it pays to keep bees in order to secure a supply for family use. Honey can be profitably used in place of manufactured syrups which are now largely adulterated with glucose.

What are the requisites for success? A thorough knowledge of the natural history of the honey-bee and of its proper mode of management together with a full acquaintance with the method of using improved apiarian implements. Such information can be obtained by reading and studying bee books and periodicals, in connection with practical experience in managing the hive. There is still another

prime factor requisite for success. It is an abundance of honey producing plants. It is not true that the "busy bee" gathers honey from "every opening flower." Some flowers secrete sweet nectar abundantly, while other's bloom gives forth scarcely any. The apiary should be located where there is plenty of bee-forage. There are other conditions such as the kind of season, state of the atmosphere, &c., &c., that must never be lost sight of in successful bee-keeping.

Who shall keep bees? Those only who have a taste for the business, and sufficient industry and energy to make an application of the requisite knowledge just at the right time.

Bees and Honey at Nebraska Fair.—Mr. G. M. Hawley gives the following notice in the *Nebraska Farmer*:

The State Board of Agriculture has given us very liberal premiums on bees and honey, in fact they gave us all we asked for. Now it should be the duty of every bee-keeper to assist in making a display that shall be a credit to the State, and also to show the State Board that their liberty is appreciated. Bee-keeping is a new industry in this State and one that is designed in a short time to play an important part in its rural economy, and behooves us now to see to it that it is properly represented. Wherever bees have been tried they have been so successful as to create a demand in that locality for them.

Let each read the premiums offered and then strive to make a display. In the premium list, where it reads "10 weeks," it should read "2 weeks." Also "comb foundation, partly grown," should read "partly drawn."

English Law Regarding Bees.—The law with regard to bees is rather peculiar, says the *London Law Times*:

A dispute as to the ownership of a swarm came recently before Mr. W. F. Woodthorpe, the judge of the Belper County Court, and it was contended that being *ferae naturae*, there could be no property in them, and that, therefore, the plaintiff, from whose land they had strayed to that of the defendant, could not demand their return or damages for their loss. It was proved, however, that the plaintiff had followed the swarm on their departure from his own land, and had not lost sight of them until he saw them alight in the defendant's garden. On the strength of the following passage from Blackstone (vol. II., p. 392):—"Bees are *ferae naturae*; but when hived and reclaimed, a man may have a qualified property in them by the law of nature as well as by the civil law. Occupation—that is, living or including them—gives the property in bees, for, though a swarm lights upon my tree, I have no more property in them, till I have hived them, than I have in birds which make their nest thereon; and, therefore, if another hives them, he shall be their proprietor; but a swarm which flies from and out of my hive are mine as long as I can keep them in sight, and have power to pursue them, and in these circumstances no one is entitled to take them"—judgment was entered in favor of the plaintiff for the amount claimed as the value of his truant bees.

☞ The *Rural Canadian* is the name of a new monthly farm paper, published at Toronto, Ont. The first number is on our desk, and presents a neat appearance. The great variety of useful and practical articles presented in the initial number bespeak for it a large subscription list. It is edited by the Rev. W. F. Clarke, whom our readers are well aware is a terse and vigorous writer. It contains 16 pages of the size of the BEE JOURNAL, and is published at \$1.00 a year. We wish the *Rural Canadian* much success.

CORRESPONDENCE

For the American Bee Journal.

Reproduction in the Honey Bee.

G. L. TINKER, M. D.

After so many eminent investigators have stated that the drone progeny of a queen mating with a drone of another race, is not affected by the cross, it would not seem to be of much use for any one to dissent from their views. Yet it is manifest that they have overlooked some very important facts, which, if they were known, would necessitate a revision of the Dzierzon theory. I say manifest, since the theory does not hold true in practice, without which, its correctness can only be assumed.

To be true, the drone progeny of sister queens, bred from a pure blooded mother, should show some degree of similarity in their marking, though one of them should have mated with a drone of another race, and produce hybrid workers. But we do not find it. In the one case the drones are imperfectly colored and inferior in many respects. In the other, there will be found great uniformity with the drone progeny of other sister queens that have purely mated.

The above facts have been observed many times, and always with like result. An Italian queen mating with a black drone, invariably begets a mixed drone progeny, many being well marked blacks, others being illy colored, with none so finely marked as those begotten of sister queens purely mated.

Further differences may be noted in the growth of the hairs at the extremity, and beneath the abdomen. On the pure Italian drone these hairs are short and thinly set upon these parts. In the pure black drone they are comparatively longer, straight, and thickly set, so as to be readily noticeable. In the drone offspring of Italian queens crossed with black drones, these markings resemble those of the purely black drone very much. So much so, indeed, that I have a settled conviction that there is black blood in such drones, notwithstanding the Dzierzon theory to the contrary.

It is my opinion, therefore, that every egg deposited by a fertilized queen is impregnated in some way by the spermatozoa of the drone with which she mated; and if it chance to be a drone of another race, the entire progeny will be hybrid.

The principle of generation by which male and female elements are formed in the animal creation, has never been explained or understood. Like the principle of life, it appears to involve problems that are no nearer a solution to-day than they were ages ago. And until some of these principles are solved, we shall not be able to explain the modus operandi of reproduction in the honey bee.

Meantime, if any theory be advanced that does not comport with well known facts, it may as well be abandoned.

The Dzierzon theory contemplates that the drones begotten of queens impurely mated are unaffected by such cross; but the standard for comparison must be the drones of pure queens of the same race. If the drones of impurely mated queens do not come up uniformly to this standard, it is plain that there is something wrong with the theory, that no amount of philosophizing can ever establish.

So too with the theory that queens are impregnated with royal jelly (drone's semen), while in the larval state, enabling them to deposit eggs that will produce variable drones.

Many examinations have been made, but no drone's semen or spermatozoa have ever been found in royal jelly, and without this can be done by a competent microscopist, the theory must be held not only untenable, but

highly improbable; for semen without the sign of a single spermzoon, would be about as worthless as the irrepressible theorist without brains.

A very probable theory of the union of sexual elements is, that immediately after fertilization, the ovaries of the queen are not only influenced and begin to develop eggs rapidly, but that there is also a primary fertilization, that affects in a general way, every embryo egg in the ovaries; and a secondary fertilization of the eggs in passing by the spermatheca by voluntary act of the queen when it is desired to deposit eggs in worker cells, and permitting the eggs to be deposited in drone cells, to pass by unaffected.

It is certain, at all events, that a general fertilization of the ovaries is not less possible in the fully developed queen than in the larval state. It has not yet been shown that the drones of virgin queens possess full virile powers. Many have endeavored to get queens fertilized early in the spring by such drones, but have failed. In an experiment of this kind 2 years since, I wintered a virgin queen, and had a fine lot of early drones. The one queen reared to supersede her flew out many times every clear day for 10 days without success, until some drones appeared from another hive, when she became fertilized at once. Hence, it is pretty certain that the Dzierzon theory is wanting on this point also, viz: that the drones of virgin queens are not possessed of virility.

As to the transmission of certain qualities of the queen and drones, I think that the rules applicable to the animal creation generally will hold good in the honey bee.

1. The female transmits the degree of fecundity, and determines the size and the form of the female offspring.

2. The male transmits the disposition and the energy to the female, and determines the size and the form of the male offspring.

It happens, however, from causes not yet understood, that some marked exceptions to these rules occur, yet the rules may be depended upon in 4 cases out of 5 applied generally.

It has been further observed that the drone influences the coloring of the worker offspring in a marked degree, and so far as I have been able to judge, that of the drone offspring also.

Thus it will be seen that I have given to the drone greater importance in the breeding of a superior race of bees, than has been generally acknowledged heretofore, and I feel certain that what I have seen, others have seen, and will be able to confirm what must be a very common observation.

New Philadelphia, O.

For the American Bee Journal.

Wintering Bees in Texas.

WM. R. HOWARD.

At the close of the honey season we should examine our bees, and put them in condition for winter. To do this, we must first understand what are the requisites, and secondly, how to secure conditions to fulfill these requirements.

Plenty of pure honey, the natural food, pure air, the natural element, and a full colony in a normal condition, with a prolific queen, are the principal elements of successful wintering bees.

Every full colony should have 25 or 30 lbs. of good honey to go through the winter safely, and should be given just what room they will occupy and no more. If they do not fill the hive, a division board should be used to contract the hive to the proper size, to accommodate our wants. Our honey season generally closes with the advent of the first "norther," as they are popularly called, but we often have many warm days after this, when bees can fly. If our bees have not honey enough to winter on in the hive at this time, and we have no sealed honey in frames in the store-room, we must resort to feeding; this we do inside of

the hive on top of the frames with pure extracted honey. We have tried a syrup made from coffee A sugar, but not sufficiently to justify us in coming to a correct conclusion. Perhaps it might do, but we cannot recommend it. If pure honey is to be fed, they should be fed all they need to carry them through the winter safely, as fast as they can store it away in the combs. Our hives should be protected if possible from the severe northwest winds; orchard trees, close fences, sheds, or boards laid against the hives, will answer the purpose of wind-breaks.

Our hives should be water-proof entirely. Ventilation is unimportant—only the hive should be kept as dry inside as possible. Our temperature never runs low enough to make ice in the hive from the condensed moisture within the hive.

Our bees wintered last winter, some with the boxes, upper chamber, etc., on, and others were covered as "tight as a jug," using close top frames with morticed entrances to upper chamber; the bees glued the top bars together in one solid plank so to speak (we use thin wooden blocks to cover the morticed entrances, which the bees glued fast to the frame as soon as placed in the hive). We may see, by going among the old box-hive men, bees winter well in every sort of hive, some with the top only laid upon the box, and not nailed; others with a crack in the side from top to bottom an inch wide extending across the top, free to rain or snow or other inclemences; and others under some shed with the top entirely off, and perhaps a foot or more from the ground, both ends open; while others are out in some thicket or briar patch in some old box of about 4000 cubic inches, and so little attention has been given it, that the box is entirely rotten, only held together by the "cross sticks," and bees working out at every angle from it, "mother earth" having claimed 2 inches of the bottom of the gum, and yet these bees have occupied this position for 6 or 7 years without loss in wintering.

Bees are wintered in every conceivable condition in this climate, except without plenty of honey, proving beyond a doubt of the most skeptical, that ventilation in this climate, is unimportant to winter bees successfully.

If we have a few weak colonies when winter approaches, they should be united with other weak colonies, or, if we wish to preserve the queens, contract the hives to a suitable size, and, with plenty of honey, they will go through the winter safely.

It will be seen from the above and foregoing, that bees winter here almost without any attention, if they have plenty of pure honey; and right here we might add, that if our bees are put away with plenty of honey, and in comfortable hives, that all they need is a "severe letting alone" until the approach of the next honey season, unless we are satisfied that they are starving, when they should be fed pure honey on top of the frames with as little disturbance as possible.

Kingston, Texas.

For the American Bee Journal.

Spruce Honey Kegs.

JAMES HEDDON.

A majority of the years of my honey producing have been devoted to the production of extracted honey. I presume I have marketed more than 150 000 pounds. I have used dozens of different kinds and sizes of packages, from a 1 pound glass tumbler to a 1,000 pound cask. I have used mainly an oak 32 gallon barrel for selling in bulk, but that carries with it the same objection that larger boxes of comb honey do, viz.: Too large to suit many customers, or to carry safely and handle easily, and to pile up economically in our rooms.

The 50 and 100 pound cheap spruce kegs just satisfy a long-felt want. They need a slight soaking with clean water, then drive and tack the hoops,

and they are as tight as a drum. I have always had the best success with wood hoops; they hold better than iron ones. These kegs are a blessed addition to our supply department, for which Mr. Alfred H. Newman is entitled to our thanks. With spruce kegs and spruce sections, do you not think we are becoming quite "spruce?" Dowagiac, Mich., Sept. 15, 1881.

For the American Bee Journal.

The Arrival of the Prize Queens.

E. L. BRIGGS.

No one but a bee-man can understand the pleasing excitement of expecting, receiving, and disposing of a half dozen rival queens, as contestants for the highest honors, known to the royal sisterhood, of beauty, strength, gentleness of demeanor, and numerical increase and prosperity of subjects, over which she reigns a queen.

Shortly after my proposition went forth to the public, I received and accepted the following queen breeders as contestants for the \$10.00 prize:

J. Osborn & Bros., of Le Claire, Iowa.

William Lossing, Hokah, Houston Co., Minn.

Charles H. Lake, 93 W. Pratt St., Baltimore, Md.

Dr. I. P. Wilson, Burlington, Iowa.

M. H. Snyder, of Elmwood, Ill.

Wm. P. Henderson, of Murfreesboro, Tenn.

As an alternate, I also accepted, J. M. C. Taylor, of Louistown, Md., in case any one of the others failed to arrive.

Of course it became my daily business to haunt the Post and Express offices, and no ten virgins ever looked for the coming of the bridegroom with more solicitude, than I looked for the coming of the queens, upon every train. After what seemed weeks of waiting, the express messenger put into my hands a 1-framed nucleus observing hive, from Dr. Wilson, of Burlington, Iowa, containing a full-sized Langstroth frame, with a queen, and her attendant escort of workers. I took her to the parlor table, and, in the presence of my wife and family, she was unveiled to our admiring gaze by lamp light. The next day the bees were set at liberty, and have been prosecuting their work with untiring zeal ever since. The queen herself was duly installed as the regal mistress of my colony No. 20, which has been filled with brood, now about ready to issue from their cells. A young queen, a complete duplicate of her mother, now reigns over the nucleus, which will tell the judges of the queen-breeding qualities of the mother.

Next came a small red-painted nucleus hive, containing 3 frames, and about a pint of bees as attendants of their queen mother, from Mr. Lossing, of Minnesota. She remains with her right-royal looking children, the nucleus having been enlarged from time to time, till it is now almost large enough to winter in. A royal princess has been reared from her brood also, that, in appearance, is fully up to the standard, and exactly like her mother.

Then came the queen of the south, from Mr. Wm. P. Henderson, of Tennessee, contained in a queen-cage with from 25 to 50 workers as attendants. I dare not, of course, speak of these queens in comparison with each other, until after the judges decide upon their relative merits; but, if all the daughters of Tennessee are as fair and gentle in appearance, and as regal in bearing as this beautiful queen, then the men of Tennessee are to be envied. This queen, after a day's probation, was installed as ruler of colony No. 16, where she still presides right royally.

On the 27th, a nucleus hive containing another transcendently beautiful queen and her escort, arrived from R. J. Osborn & Bro., of Le Claire, Iowa. She was without any probation gladly welcomed, and installed over colony

No. 37, where a young unfertilized queen had been destroyed. When the attendant workers began to move on to the comb, the tenants of 37 met them with a buzz of gladness, and stretched out their bills to feed their approaching visitors. So the queen was permitted to move on in the procession too. She was fed and caressed from the start. She commenced depositing eggs at once, and her progeny will be on time for the coming exhibition.

On the 7th, a nucleus containing queen and bees on 3 frames, arrived from M. H. Snyder, of Elmwood, Ill. The accompanying bees are exceedingly large, and seem bent on making up for all lost time, by filling their nucleus with honey. They are a dark leather color. The brood of the queen is issuing quite rapidly, and of course will show her breeding qualities by the time the day arrives. The queen is very large, brightly colored and beautiful, and pays no attention on being handled, pursuing her business as though the comb remained in the hive.

Take it all in, they are as fine a collection of queens as I ever saw; one, of which is at least from an $\frac{1}{8}$ to a $\frac{1}{4}$ larger than any yet having come under my observation. What her progeny may be, in this respect, time alone will determine.

From some reason or other, the one from Baltimore has not arrived yet, neither has the alternate from Mr. Taylor. Therefore, if any other queen-breeder wishes to compete for the prize, and will forward a nucleus hive at his own risk containing a queen, accompanied with a sufficient number of bees of her own progeny (and none others), I will put her in, provided the others do not arrive, and either pay for her, or return her in as good order as received, at the express office, provided the others do come. However, if no other comes, one of the five will be awarded the \$10.00 prize, in addition to the sale price, and I shall be abundantly satisfied with the result of the enterprise.

Wilton Junction, Iowa.

For the American Bee Journal.

The Wintering of Bees.

E. ROOD.

Were I younger, I would try a very simple experiment in wintering, to wit: As soon as the first killing frost, I would extract all the honey, then select sufficient combs to contain syrup made of pure cane sugar and water (say 2 lbs. of sugar and 17 ounces of water), simmer them together for a few moments, skim, and feed 25 lbs. to each colony, by some of the variety of feeders, into combs having no pollen. This should surely be done in season for the bees to cap it over. Thus the experiment covers two points:

Bacteria (or poisoned honey in some other way), and the evil effects of pollen if any; rye meal may, and should be substituted for it in the spring. This done, all causes for dysentery seem to be guarded against, except one: Epizootic, or local atmospheric influence, like Asiatic cholera with the human race, or epizooty with horses.

By the above experiment, the three pounds of extracted honey will bring as much as the sugar will cost, and more.

I know of no one that has said that bees will winter on candy. Mr. Langstroth has not; but they will do well on it when they can fly often. I tried a good colony 2 years since, by placing only empty combs in the hive, on Nov. 1, and gave the bees pure cane sugar candy on the frames; the moisture from their breath softened it. While they could fly every day they did well, and they seemed to prefer the candy. But December was cold every day, and they all gorged themselves to death within 30 days.

Fifteen colonies that were short of honey, one spring, after removing them from the cellar, I fed for 1 month

on candy; it carried them through nicely; they did not seem to attempt to store liquified candy at all.

One writer in the BEE JOURNAL, says his bees dwindled badly in the cellar in the spring, as I have not a particle of doubt all have if the cellar is warm. The living drag out the dead, tumble them to the floor together, and how does the living one find its way to her hive again? Mr. Kelley, of Wayne, Mich., devised a perfect remedy by tacking to the bottom board a small box, so smooth inside that a bee cannot carry her dead sister up; and they will tumble into the box; she will drag the dead one around, when it finds that it cannot succeed in carrying it up the side of the smooth box, it will abandon the attempt, and of course seek her home and find it. Wayne, Mich.

For the American Bee Journal.

Parthenogenesis Again.

PROF. A. J. COOK.

I have been repeatedly asked, and even urged to reply to the article by Mr. C. J. Robinson, in AMERICAN BEE JOURNAL for Aug. 24th, on parthenogenesis. My time has been so occupied that I have not been able to get a moment for this purpose till now; and even now, I must be very brief, which I can the better afford to be, because of the able and excellent article from Wm. R. Howard, M. D., (AMERICAN BEE JOURNAL vol. 17, p. 290), just at hand.

First let me say, that in stating that all intelligent apiarists accepted parthenogenesis, I by no means meant to be discourteous, or harsh, truth is too glorious a thing to wrangle about; life is too short, too full of golden opportunity for good work, to admit of any time for harsh words or unkind allusions. The article which I wrote was prepared and read before the Entomological section of the American Association, for the advancement of science one year before it appeared in the AMERICAN BEE JOURNAL, therefore I did not then know of Mr. Robinson's views. Major Munn was in his dotage when parthenogenesis was first brought to the attention of scientists, and died some years ago, (I think now that without doubt, he is a believer in agamic reproduction). Yet even if a few do fail to accept the theory, these exceptions but prove the rule, and we might still say that parthenogenesis is accepted by all intelligent apiarists.

Mr. Robinson asks for proofs; I will give them:

1st. As well shown by Dr. Howard, this phenomenon is not confined to bees, or even to insects. If Mr. Robinson will isolate plant lice just as they come from the parent louse (they are brought forth alive, being ovo viviparous) or he may carefully dissect the parent and take out the young lice, he will find that each one will produce lice when full grown, though it has never seen another louse male or female, since its birth. Von Siebold has fully shown that many if not all, aculeate Hymenoptera, such as bees and wasps, males are the result of agamic reproduction. This then in case of bees is not exceptional, but an illustration of a law wide extended among the lower animals.

2d. Isolate a queen or prevent her from pairing by clipping her wing, and she will certainly lay none but drone eggs. Examine with the microscope and we find no sperm cells in her spermatheca or oviducts. In all drone-laying queens the spermatheca is likewise depleted. The same is true of fertile workers. This of itself is a demonstration of the truth that drones result from parthenogenesis.

3d. The eggs in queen and worker cells contain the spermatozoa or male elements, while none exist in the eggs which are to develop into drones. Von Siebold and our own Dr. Leidy demonstrated this years ago, while many other microscopists have verified it since. This too demonstrates the law.

Would such an expert scientist and able apiarist as the late Baron of Berlepsch, who at first stoutly resisted this view, in opposition to Dzierzon, have upon thorough research, such research too as the Germans make, keen, close, untiring, have accepted this law, only as the loved truth and found it here?

Mr. Robinson in his article in the BEE JOURNAL, vol. 17 page 89, carries the idea that some think that queens are the result of parthenogenesis. The queens can only come from eggs which have received the sperm cells, and after the eggs hatch the food must be richer (a fact of which I am persuaded), and more abundant. He says Dzierzon "jumped at his theory." I do not so understand the matter. Dzierzon pronounced this law not as an hypothesis, but as a truth demonstrated by practical observation, and sustained by two of the most able scientists of the world—Von Siebold and Leuckart.

The theory of Mr. Kirby, as given by Mr. Robinson, it seems to me is entirely untenable.

1st. It has no parallel, so far as I know. Elsewhere in the animal kingdom, sperm cells are always the product of male organs, and can only be effective when they come in contact, in a fresh state with fresh eggs.

2d. I have repeatedly examined royal jelly with a high-power microscope, and could not have failed to notice the sperm cells if they were there. There were none. That the semen could be deposited and used at pleasure by the workers is impossible. It is well known that sperm cells are only vital when comparatively fresh.

It occurs to me that Mr. Robinson can test this matter easily for himself. Early next spring let him take frames of empty comb one of which shall be placed in a hive with a queen—no drones of course—just long enough to secure some eggs; with these let him make a nucleus. He may feed sugar for food—the bees will gather pollen enough for the few larvae, and I will warrant him a queen. Yet, on his theory, where are the sperm cells. I will tell him: They were incorporated in the egg as it passed the spermatheca of the queen.

In answer to Mr. Robinson's last question, I would say that had he reared as many insects as I have, and noted the wondrous effect on the imago of partial starvation of the larvae, after a reduction in size of at least one-half, with parts illy developed, and then remember as Darwin has so graphically shown, that in all animals the reproductive organs are, of all the tissues, the most sensitive, we may easily believe that more or less food, of richer or less rich quality, might readily accelerate or retard the development of the ovaries of worker larvae. I find that these rudimentary organs do vary in different workers.

I have shown that Syrian bees have afforded a proof of parthenogenesis. The points will be given in a paper to be read at the National Convention. Lansing, Mich., Sept. 18, 1881.

For the American Bee Journal.

The Degeneration of Bees.

GREINER BROS.

In order that we may have the above subject a little more investigated, we wish to ask Mr. S. S. Butler his opinion on one or two questions.

From the related instance of the 8 weather-beaten pine boxes, Mr. B. draws the conclusion that that kind of bee-habitation, being let alone, is better adapted for successful bee-keeping than the movable frame hive with its various manipulations. He says, "I claim that his bees had not lost any of their natural vigor or toughness, had not degenerated by either rearing forced queens himself, or being near enough to one who has," etc.

We refer the gentleman to the statistical table on page 228 of the AMERICAN BEE JOURNAL, and ask the question: Why is it then, that the

box hive has suffered a loss last winter of 89 per cent., whilst the Langstroth hive, which is used, perhaps, as much as any other hive for artificial swarming, and forced queen-rearing, has suffered the least, only 43 per cent.

For the last 6 years we have made bee-keeping our exclusive business, and within a radius of 15 or 20 miles, we are the only ones that have practiced artificial swarming and forced queen-rearing. Why is it now, that that our loss last winter was less than one-half of our bees, being 75, of 160 colonies, while our neighbors, as far as we could learn, have lost from 75 to 100 per cent., box hives not excepted.

There seems to be a little misunderstanding in the term, "forced queen rearing." We have no doubt that queen-rearing, if practiced as described by Mr. Butler, would result in degeneration. He says, "The queenless part rears one from larva, from 1 to 3 days old, making a queen not up to the standard of one reared by natural swarming." This may be true, but the queenless part should be supplied with a laying queen when the division is made, or else the main object of artificial swarming is missed.

The queen should not be reared from a larva 3 days old, nor by a divided swarm, but should be reared from the egg of a selected mother, and by the best colony in the apiary. Queens reared in this way have answered our purpose first rate; some bee-keepers may prefer those reared by the swarming impulse, but when we compare our last winter's loss with the loss of apiaries where the latter plan has been practiced; when we observe that our best colony has given us the enormous yield of nearly 400 lbs. of comb honey in 2 lb. sections, and that the average yield of one of our branch apiaries is 135 lbs. per colony, we can well afford to rear our queens by the forced system, and recommend it as safe and harmless.

Naples, N. Y.

For the American Bee Journal.

Preparing Bees for Winter.

L. J. DIEHL.

Mr. H. Rickey, asks in reference to my article on page 268 of the BEE JOURNAL, of Aug. 24, "Does Mr. Diehl leave the hole near the entrance open all winter, or what is it for? Does he contract the entrance?"

In reply, I will say that I leave the auger hole open, and I have found that it answers two purposes: First, there is circulation of air enough to keep the hive pure and sweet, and yet not enough to cause a draft in the hive, and cause over consumption of honey.

I advised that all colonies should face the south; this is very essential safe wintering with my method. All combs should run from front to rear, then if the hive faces the south, and is not shaded too much, the morning sun in winter will strike the hive and the combs, and will conduct the heat to the bees. The hole in front will come opposite the cluster of bees, and they will take advantage of a few hours' sunshine to void the feces when the lower entrance is frozen up, and otherwise closed.

I contract the entrance to about $1\frac{1}{2} \times \frac{1}{4}$ of an inch, thus preventing a draft. The auger hole being $\frac{1}{2}$ inches from the top of the hive, there is no upward ventilation.

In this way I have wintered with success for the last 6 or 7 successive winters. In this county there was scarcely any bees that lived through the winter, with the exception of mine, and my loss was 6 out of 80 colonies. My bees have increased to 135, mostly by natural swarming, and they are in splendid condition for winter. I have taken 2,500 lbs. of honey, mostly in 2 lb. sections, and have reared 125 queens. This has been a good season for bees, but I have been so busy in the store that I could not give them the attention they should have.

Butler, Ind.

CONVENTION NOTES

Bees and Honey.

By particular request, the editor of the BEE JOURNAL gave a lecture at the Court House, in St. Joseph, Mo., under the auspices of the St. Joseph Exposition, on the above subject, on Thursday, Sept. 8, 1881. The St. Joseph Herald gives the following report of the lecture:

Mr. Thos. G. Newman, editor of the AMERICAN BEE JOURNAL, of Chicago, delivered a very interesting lecture to an appreciative audience, last night, at the Court House. Mr. Newman is a very pleasing speaker, and when talking about bees, he is at his best. There was present at the lecture a number of prominent gentlemen of the city, Mayor Piner presiding over the meeting, and introducing the speaker. We give the following synopsis of Mr. Newman's lecture:

Mr. Newman said that the magnitude of the industry of "bees and honey" could be estimated by the fact that there were in North America 300,000 persons who keep bees, and if these apiaries average but 10 colonies each, the number of colonies reaches 3,000,000, and if these produce but the very small average of 25 pounds of honey per colony, then the product is 75,000,000 of pounds of honey, worth 10,000,000 of dollars; and if each colony of bees yields but 1 pound of beeswax yearly, then the wax product at 20 cts. per lb. is worth \$600,000.

The lecturer then reviewed at length the rise and progress of apiculture from ancient Bible times to the present, showing the several "progressive steps" in the science, and illustrated his lecture by a full description of the most useful implements of modern bee-keeping, many of which he exhibited to the audience and explained their uses.

He detailed the efforts put forth to obtain superior races of bees, and was very emphatic in his assertions that the credit belonged to America for obtaining, by careful selection and improvements, the best strains of Italian bees in the world, saying that he had taken some of these superior bees from his apiary in Chicago to the most prominent European countries, including Italy (the home of the Italian bee), and that these bees were universally praised for their singular beauty, size, docility, etc., and that since he returned to America the Italian bee paper, *L'Apicoltore*, published at Milan, Italy, has thus said: "The American bred Italian bees exhibited to us by Signor T. G. Newman, editor of the AMERICAN BEE JOURNAL, on his recent visit to Italy, were the prettiest bees we ever saw."

He said that five points were essential to entitle bees to the admiration of bee-keepers, viz.: They must be prolific, industrious, docile, hardy and beautiful in appearance. The queen must be able to keep the hive full of bees to gather the honey harvest when it comes (and it is quite often of short duration); the bees must be industrious, to let nothing escape their vigorous search while gathering the sweet nectar; they must be docile to allow the apiarist to manipulate them with ease and pleasure; they must be strong and hardy to withstand the rapid changes in climate; and they must be of singular beauty to attract the admiration of the fancier of fine stock. He said his ideal bee would be present at the very moment when the slumbering flower awoke to consciousness, and unfolded its buds to take in the first rays of the morning sun, and will dip into that tiny fountain which distills the honey drop by drop, and bear away its sweet nectar to its waxen cells of beautiful comb.

He said that while he did not know what may be the color, markings or

all of the special features of "the coming bee," he was certain that it would gather the most honey, be the most docile, hardy and industrious, and that its name will be "Apis Americana."

From the fact that by the advance civilization, many of the honey-producing trees, plants and shrubs were disappearing; the lecturer argued at some length the necessity of planting for the honey bees just as much as for any farm stock—in order to secure a succession of bloom from spring to fall.

The speaker said that notwithstanding the many improvements that had been made in apiculture, it was but yet in its infancy—that the flora now going to waste in America could, if properly gathered by bees, produce a revenue of 200,000,000 of dollars annually.

The lecturer then entered into detail about the wonders of the bee hive and its industrious little insects. He described the development of the queen, drones and workers, and gave the audience an insight into the wonderful economy of the hive. He said he had seen the seven wonders of the world, but the wondrous little bee, with its architectural skill, governmental wisdom, untiring activity, and marvelous transformations, was really the Aaron's rod that swallowed up all the other wonders—many of which he detailed at considerable length.

Some were fearful of an over-production of honey, but the speaker said that there was already a demand far in excess of the supply. Just before leaving Chicago to come to St. Joseph to deliver this lecture, he had received a letter from England asking him to send 250 tons of comb honey, and the purchaser stood ready with cash in hand to take it at three times the price it would bring in America. The reason for this foreign demand was obvious. Europeans had neither the honey-producing flowers, favorable seasons, nor the improved appliances to gather the honey at home, and hence must depend on America to supply them.

Mr. Newman closed his lecture, which had been interrupted by frequent and prolonged applause, by saying that he had read with much pleasure the article in the St. Joseph Herald of last Sunday, entitled, "Bees and Honey," and was amused at the sagacity of the reporter as well as the philosophy of Mr. A. M. Saxton, one of the prominent citizens of St. Joseph, who had been interviewed. Mr. Saxton was right in saying that the inhabitants of St. Joseph and its vicinity should be benefited by the display of honey and bees at the Exposition, and the speaker said he was glad to see that Mr. Saxton had offered special premiums of \$40 for honey exhibited by ladies. Many ladies were already engaged in the industry, and were among the most successful, nature having endowed them with finer feelings, and as close a scrutiny and activity as it had man. The speaker said that to the untiring energy of Mr. R. S. Musser, the credit was due for making the bee and honey show so much of a success. It had really been one of the chief attractions of the Exposition, many having come from 50 to 100 miles to see it alone. He most emphatically endorsed the following sentiment, quoted by Mr. Saxton:

"Work for some good, be it ever so slowly.
Cherish some flower, be it ever so lowly.
Labor!—all labor is noble and holy."

Success in any industry depended upon information, study, activity, adaptation and skill, and anyone who possessed these essential qualities, and was willing to learn, could make a success of bee-keeping. Those who would not study and learn from the experience of others how to care for bees, should keep out of the business entirely.

In conclusion, the speaker detailed some of the principal qualities of honey, both as food and medicine, and then took his seat amid much applause.

A vote of thanks was unanimously given to the Hon. T. G. Newman, of

Chicago, for his lecture. Mr. Newman is not only the editor and publisher of the AMERICAN BEE JOURNAL (the first weekly bee paper in the world), but is the author and publisher of several works on the subject of scientific bee-keeping and honey production.

Bee and Honey Show at Manchester, England.—The London Horticultural Journal gives the following account of this show:

The Committee of Management arranged to have no competition in the bee tent, and requested Mr. Pettigrew, of Bowdon, to provide an attractive and interesting display of bees and honey from his own garden. He consented to do so, believing that an exhibition of this kind would go far to popularize bee-keeping. Mr. Pettigrew resolved to make this show a novel one, by introducing a new form of observatory hives, and to exhibit legends on black boards done in honey comb by bees, and sets of icicles of honeycomb under glass shades. The state of his health prevented him from doing all he intended and desired to do. The icicles were not done. However, the exhibition was evidently a great success. The honey tent was crowded with visitors every day, and no one could enter it without hearing expressions of wonder and gratification from all classes of visitors. The observatory hives, 4 in number, were of cheap and simple construction, with bees and glass on one side only of each super. The queen of each super had a white woolly cotton thread tied round her waist, which enabled the spectators to see her at a glance, and watch her movements as she wandered amongst the community. But the most conspicuous and novel exhibits of the bee tent were two black boards 6 feet 4 inches long, and 2 feet broad, with two legends on them done in honeycomb—viz: "God Save the Queen," and "Industrial Exhibition." The letters being 5 inches long or thereabouts were easily read, and seemed to delight all classes of visitors. Both boards were labelled "Our First Efforts in A B C." Honey of different kinds and of the highest quality in glass dishes were on the tables, beside bone spoons, for visitors to taste; and honey in glass bottles—4 lbs in each—was there for sale. The demand for run honey was extraordinary, and all was speedily sold at 1s. 4d. per lb. (about 30 cts). Three bottles of crude honey were on the tables for the purpose of showing, in the exhibitor's opinion, that honey proper and fit for use on the breakfast table is not found in field or forest, but is made by bees at home from the crude materials found in flowers.

The time selected by the Executive Committee for holding the National Convention, at Lexington, Ky., is October 5, 6 and 7, 1881. All beekeepers are invited to attend and take part in the deliberations of the Convention. As Lexington is a central point, the Executive Committee hope to have a large attendance from the North, South, East and West, and from Canada, and that the 12th annual meeting of the North American Beekeepers' Society will be the most interesting meeting that the bee-keepers of the United States have ever held.

N. P. ALLEN, Pres.

Kentucky Bee-Keepers' Association.—The second annual convention of the Kentucky State Bee-Keepers' Association, will be held in the Exposition Building, in Louisville, Ky., on Wednesday and Thursday, Oct. 12 and 13, 1881.

A fine display of bee-keepers' supplies, honey, etc., is expected, and some of the most prominent bee-keepers in America, who will be in attendance at the National Beekeepers' Convention, at Lexington, Oct. 5, 6, and 7, are expected to attend. All are invited. N. P. ALLEN, Pres.

The Northwestern Bee-Keepers' Association will meet in Chicago, on Tuesday and Wednesday, October 25 and 26. All bee-keepers are cordially invited to attend. It is desired to make this one of the most interesting conventions ever held in the United States. C. C. MILLER, M. D., Pres.
C. C. COFFINBERRY, Sec.

The Western Michigan Bee-Keepers' Association will meet in Berlin, Ottawa, Co., Mich., Thursday, Oct. 27, 1881, in Huntley's Hall, at 10:30 a. m. All interested, are cordially invited.
WM. M. S. DODGE, Sec.
Coopersville, Mich., Aug. 29, 1881.

The Northern Michigan Bee-Keepers' Association will hold its fourth Annual Convention at Maple Rapids, Clinton Co., Mich., Oct. 11 and 12, 1881. O. R. GOODNO, Sec.

Bee-Keepers' Union.—The Eastern New York Bee-Keepers' Union Association, will hold their eighth semi-annual Convention on Tuesday, Sept. 27, 1881, at 10 a. m., at Knowersville, N. Y. All bee-keepers are invited to attend. W. D. WRIGHT, Pres.
N. D. WEST, Sec.

The South Eastern Mich. Bee-Keepers' Association, will hold its 4th meeting at the Court House, in Ann Arbor, Wednesday, Oct. 5, 1881, at 9 o'clock a. m.; the week of the County Fair. An adjourned meeting may be held during the week. All interested are invited to attend. By order of the Executive Committee.
N. A. PRUDEN, Chairman.

The North Eastern Wis. Bee-Keepers' Association, will hold its fall meeting at Peewaukee, Wis., on Tuesday and Wednesday, Oct. 11 and 12. A full attendance is cordially requested. Notice of the place of meeting will be found at the local Post Office.
GEO. CHURCH, Pres., Neenah, Wis.
FRANCES DUNHAM, Sec., Depere, Wis.

South Western Iowa Bee Association.—The regular annual meeting of this association, will occur at the apiary of James T. Fife, in Jasper township, near Corning, Iowa, on Thursday afternoon, Sept. 29. The place of meeting is such that the topics considered will be practically demonstrated. Following is the programme: Business of Society; raising of queens; introduction of queens; dividing of bees; practical handling of bees. A full attendance is desired.

J. T. FIFE, Pres.

W. J. OLIVER, Sec.

The Eastern Michigan bee-keepers' Association will hold its fall meeting in Detroit, Oct. 4, in the Y. M. C. A. hall, at 10 o'clock a. m.
A. B. WEED, Sec.

Owing to the fact that the time of the regular meeting of the Union Bee Association, at Shelbyville, Ky., conflicts with the time fixed by the executive committee, to hold the National at Lexington, the meeting of the Union, at Shelbyville, has been postponed till the 20th of October.
G. W. DEMAREE, Sec.
Christiansburg, Ky., Sept. 3, 1881.

The Rock River Valley Bee-Keepers' Convention, will be held at Monroe Center, on the third Tuesday in October. We hope a good attendance will be the outcome, and the bee interest revived.
D. A. CIPPERLY, Sec.

The Southwestern Wisconsin Bee-Keepers' Association will hold its next meeting in Platteville, Grant Co., Wis., Nov. 30, 1881.
N. E. FRANCE, Sec., Platteville, Wis.

SELECTIONS FROM OUR LETTER BOX

Amount of Honey Needed for Winter.

I have 6 colonies—3 are Italians and 3 are hybrids. The Italians done a great deal the best. Please answer: How many lbs. of honey are plenty for a colony to winter on in the cellar, and how much on the summer stand?

CHAS. A. PONTIUS.
Canton, O., Sept. 8, 1881.

[For an ordinary winter, in the cellar, 20 to 25 pounds should be sufficient; on the summer stand, 25 to 30 pounds. In either case, 5 pounds more is better.—ED.]

California Honey Crop.—In the BEE JOURNAL of Aug. 24 (just at hand), you quote from the San Francisco Examiner, the information that southern California will have an average crop of honey this year. This is not so; as not one in ten of the bee-men will have a pound of surplus. We were very fortunate in securing about 900 lbs. from 140 colonies, but will have to feed this winter.

HOLMES & SCOTT.
Los Angeles, Cal., Aug. 30, 1881.

Maine Items.—Inclosed find specimen of plant which the bees work on early and late. It grows in my beeyard with the spider plant and Simpson honey plant. Although in full bloom, I have seen no bees on either of them, but plenty of hornets on both. What is the matter with the highly extolled spider and honey plants? There is doubtless honey in them; I have seen the drop of honey in the spider plant, and as the wasps are on the other, there must be honey in it. I would like the name of the specimen I send. We started a bee-keepers association—the first in Maine—called the Northeastern Bee Association. The yearly meeting is held the second Tuesday in February. We have held three quarterly sessions, which were very interesting. Bees have done well here this season. I started work last spring with 26 colonies, run them for honey all I could, have had 10 natural and 4 artificial swarms. My bees are mostly blacks—having 3 Cyprian and 2 Italian queens. I shall have about 1,000 pounds.

LUCIAN FRENCH.
Sangerville, Maine, Sept. 3, 1881.
[Mr. French sends an aster. I suppose the reason that the bees did not visit the figwort and spider plant was that they found something they liked better. The bees worked well on our Rocky Mountain bee plant until fall bloom, when they left it altogether.—A. J. COOK.]

Great Trotting Week at Lexington.—Believing, as I do, that many beekeepers are interested in the best strains of horses, as well as bees, I take pleasure in announcing through the BEE JOURNAL that the Fall Trotting Races commence here on Tuesday, Oct. 4, and continue four days, so that those who attend the North American Bee-Keepers' Convention, and desire to see the best strains of Kentucky horses trotting on their "native heath," will have an opportunity to do so. The prospects for a large and enthusiastic attendance at the National Convention are very flattering. The following are among the most prominent from a distance who have signified their intention to be present: D. A. Jones, of Canada, the "Bee King of the Islands," I might dub him; Dr. J. P. H. Brown and lady, of Augusta, Ga.; Mrs. Frances Dunham, of Wisconsin; C. C. Coffinberry, of Chicago, Ill.; Chas. F. Muth, of Cincinnati, O.; and Mrs. L. Harrison, Peoria, Ill. I should be pleased to hear from others.

W. WILLIAMSON,
Vice President for Kentucky.
Lexington, Ky.

Autumn Honey.—The present exceptionally dry season, in strong contrast to the very wet season a year ago, shows clearly that a dry season is far less detrimental to the apiarist than a wet one. Last year we got very little honey, while this year we have a large yield of beautiful autumn honey. We have increased from 5 to 12, and shall get from 500 to 600 lbs. of honey.

A. J. COOK.
Lansing, Mich., Sept. 10, 1881.

Well Sold.—I have just sold a part of our crop of honey at 22 cts., put up in our patent caps. I have sold to the same party for the last 3 years.

J. E. MOORE.
Byron, N. Y., Sept. 10, 1881.

[That is a good sale. It is always desirable to keep, as well as to get customers. It is so much more pleasant to deal with those we know and have had experience with.—ED.]

Those Italian Bees in Australia.—I have transferred the 2 colonies of Italians received from Mr. A. H. Newman, of Chicago, on July 2d. I found in both hives the combs in the center frames had been forced sideways from their original frames, in such a manner as to lead to the frame adjoining being attached to the comb intended for its neighbor. I transferred them without separation, and without the long-coveted satisfaction of the sight of an Italian queen. I shall eventually separate them, when I can do so without danger of robbing. The number of bees in each colony is small. They fly briskly every day, a few returning with pollen. It seems to me that the damage to the combs must have occurred on the journey by rail from Chicago to San Francisco, when they must have been exposed to more rough usage than on the sea voyage. I cannot but think that it would have been an improvement, if the combs had been secured to the frames by wire or other fasteners. S. MACDONNELL.
Sydney, Australia, Aug. 8, 1881.

[We are informed the weather was excessively hot when the bees were shipped from Chicago, and presume the combs softened before reaching San Francisco. Of course the colonies were depleted of all the field-workers possible before shipping, and if they reached their distant destination with bees enough to cover three frames each, they done remarkably well. As they were bringing in pollen on the 8th ult. (which is pretty positive proof that they have commenced breeding), they will now soon breed up. We think wooden binders much better for fastening in combs for shipping than the wires, for various reasons.—ED.]

Drone Eggs from Young Queens.—In addition to the editorial reply to Mr. A. B. McLavy, page 292 of the BEE JOURNAL for Sept. 14, I would say that the young queens often lay drone eggs even in worker cells for the first few days of their laying. They do not have ready control of the muscles which control the spermatheca, and so the required sperm cells are not forced on to the eggs. Young birds and insects often have to try awhile before the muscles of flight will work, so this lack of power in the young queen is not anomalous.

A. J. COOK.
Lansing, Mich.

Better than Expected.—When I last wrote you (in August), the probabilities were that I would have to feed my bees; but since then the honey yield has been better. I will now secure from my Italians about an average of 30 lbs. of comb honey from each stand, and will leave the bees very strong for winter. My 1 colony of black bees finally died. They were not worth their trouble.

DAVID HIGBEE.
Avoca, Iowa, Sept. 14, 1881.

Light Basswood Yield.—I had 45 colonies of bees in the best condition of any I ever had during basswood bloom, yet I only obtained about one barrel of basswood honey; it rained continuously. I have but 1,200 lbs. for the season's work.

JAS. E. CADY.
Medford, Minn., Sept. 8, 1881.

Another of H. A. Burch's Customers.—I am one of the unfortunate ones in the H. A. Burch & Co. swindle. As they were highly recommended by Jas. Heddon, I supposed them to be all right, and sent them \$5.75 for 6 queens on April 25th, queens to be shipped on or before June 20th, or the money to be returned. I do not receive either money or answer to my letters. Would it not be best, for all who wish, to join in a lawsuit against said firm, get a judgment, then keep an officer to watch them, and as fast as anything shows itself to fasten upon it and sell it to satisfy such judgment? It strikes me he would rather settle up than have a judgment of this sort, with contingent expenses, over his head.

JAS. E. CADY.
Medford, Minn., Sept. 8, 1881.

[The above letter does serious injustice to Mr. Heddon, who, as we understand the matter, never endorsed H. A. Burch & Co., nor their method of transacting business, but did compliment them on some bees which he purchased from them, and gave them permission to use his name that far only. We fail to see any good that can be derived from bringing suit and obtaining judgment, if H. A. Burch & Co. have nothing subject to execution, as the costs of suit would have to be advanced by the creditors, thus "throwing good money after the bad." If, instead of being unfortunate, this firm have been preparing to defraud their customers, then of course they took precautions to secure their property against execution, and the fact of their referring their victims to Mr. A. I. Root for payment would seem to indicate that Mr. Burch considers it cannot be collected from him by any legal process.—ED.]

Bees Have Done Well.—My bees have done very well, considering the season. They have not gathered as much honey this year as they did last year, although those that did not swarm did well. There is a general complaint of bees not gathering much honey all through this section of country. They swarmed too much to lay up much honey. Where white clover was plenty and close at hand, and where bees had proper care, they have done very well. THOS. LASHBROOK.
Waverly, Iowa, Sept. 12, 1881.

Bees and Honey in Georgia.—The interest in bee culture here is not what it ought to be, and what it would be if intelligently pursued. I have sold all my comb honey in 1 lb. packages this year, for 20 cts., and extracted at 15 cts., and it was spring honey at that, which is always dark. The bees are now storing honey from cotton bloom and goldenrod, which makes the finest honey we get. It is this honey I expect to exhibit at our State fair. I am sowing largely of melilot this fall, and I hope to be able to give a favorable report from the experiment, when it begins to yield honey. If we can only get something that will be to us what white clover is to the northern and western honey producer, we should have the best country in the world for bees and honey. We do not know anything about the problem which so vexes the bee-keepers in the colder sections—wintering bees. I never lost a colony from winter trouble in a movable frame hive, as I can feed, if necessary, any day of the year, and I always try to keep informed as to the condition of every colony. Your criticism on Mr. Root's

proposition to make good losses from delinquent advertisers, is to the point. Of course publishers are expected to exercise proper caution, but there, I think the responsibility ends. I think that an honest man would scorn to accept from a publisher what another owed him.

F. N. WILDER.
Forsyth, Ga., Sept. 2, 1881.

Three Hundred Pounds from One Colony.—My bees have done well for this season. I shall realize from one colony 300 pounds of comb honey, of a fine quality. My importing has been a very great benefit to me.

G. H. ADAMS.
North Nassau, N. Y., Sept. 10, 1881.

The Bee and Honey Show at Baltimore, Md.—My "old reliable" bee hive carried off the first premium; the society's gold medal. My "molded foundation," 1st premium, \$3.00; Bingham smoker, 1st do.; best colony of bees (Italians), 1st do.; best collection of bees, 1st do.; best crate of honey, 1st do.; best 10 lbs. of comb honey, 1st do.; best collection of honey, 1st do.; best display of honey and bees, 1st premium special. A clean victory. I turned loose 3 colonies on the grounds within 10 feet of horses, and in the midst of a crowd of 13,000 persons, and handled them, removing all the combs, showing them the queen, and without dress, smoke, or anything of any notion to quiet them; not a person reported stung.

CHAS. H. LAKE.
Baltimore, Md., Sept. 12, 1881.

Good Honey Crop.—We have 11,000 lbs. of honey (most all white), and an increase of 143 colonies from 156 in the spring. Crop is short on account of severe drouth. GEO. W. HOUSE.
Fayetteville, N. Y., Sept. 12, 1881.

Cyprian Bees.—I will give a little of my experience with Cyprian bees. I sent to a New York queen dealer last year, for one of the first queens which came from Cyprus, and the dealer said he sent me a choice one. I thought best to test her before breeding from her. Lo! after testing her, I find her progeny to be the best fighters that I ever saw. If the Cyprians are all like mine, I would advise beekeepers to let them alone, or if they have them, to get rid of them as soon as possible. I am very glad that I did not let them mix with my Italians. I sent the queen back to the queen dealer to-day. He can do as he likes with her.

M. H. MILSTER.
Frohn, Mo., Sept. 13, 1881.

A Ton of Comb Honey from 35 Colonies.—Last spring my bees were reduced to 35 colonies; they increased by natural swarming to 65; they have done very well this season. I have taken off about a ton of surplus honey in sections, and 6 pound boxes. The local demand for honey is good; it sells readily for 18 to 20 cents.

L. F. BIGLOW.
Brooklyn, Wis., Sept. 14, 1881.

Bees in New Jersey.—My bees have done very well this summer. Last fall I had 54 colonies, and by May 1, I had lost them all but 14. I increased to 37 by July 1. I only ran 1 hive for box honey, and that gave me 25 lbs. of comb honey, and 45 of extracted. I intend to let the rest have all they have gathered. We have had no rain since July 4, and everything is dying here. The bees to-day are gathering a little honey from goldenrod, and that will not last long if we do not have rain shortly. Success to the BEE JOURNAL.

JOSEPH W. RIKER.
Mont Clair, N. J., Sept. 8, 1881.

Virgil's Bee Lore.—Virgil says in his Georgics, that the honey bee often takes up stones or ballast on a stormy day. Is this true now? STUDENT.
Agricultural College, Guelph, Ont.
[I doubt if it was ever true.—WM. F. CLARKE.]

Special Notices.

Single copies of the JOURNAL sent postage paid for 5 cents each.

Those who may wish to change from other editions to the Weekly, can do so by paying the difference.

Advertisements intended for the BEE JOURNAL must reach this office by Saturday of the previous week.

Ribbon Badges, for bee-keepers, on which are printed a large bee in gold, we send for 10 cts. each, or \$8 per 100.

Articles for publication must be written on a separate piece of paper from items of business.

Photographs of prominent Apirists—Langstroth, Dzierzon, and the Baron of Berlepsch.—Price 25 cents each.

When changing a postoffice address, mention the old as well as the new address.

Constitutions and By-Laws for local Associations \$2.00 per 100. The name of the Association printed in the blanks for 50 cents extra.

Faded or Gray Hair gradually recovers its youthful color and lustre by the use of Parker's Hair Balsam, an elegant dressing, admired for its purity and rich perfume. 36W4t

There is More Strength restoring power in a 50 cent bottle of Parker's Ginger Tonic than in a bushel of malt or a gallon of milk. As an appetizer, blood purifier and kidney corrector, there is nothing like it, and invalids find it a wonderful invigorant for mind and body. See other column. 36W4t

A Sample Copy of the Weekly BEE JOURNAL will be sent free to any person. Any one intending to get up a club can have sample copies sent to the persons they desire to interview, by sending the names to this office.

Examine the Date following your name on the wrapper label of this paper; it indicates the time to which you have paid. Always send money by postal order, registered letter, or by draft on Chicago or New York. Drafts on other cities, or local checks, are not taken by the banks in this city except at a discount of 25 cents, to pay expense of collecting them.

Premiums.—For a club of 2, weekly, we give a copy of "Bees and Honey"; for a club of 5, weekly, we will give a Cook's Manual, a Bee-Keeper's Guide, bound in cloth; for a club of 6, we give a copy of the JOURNAL for a year free. It will pay to devote a few hours to the BEE JOURNAL.

It would save us much trouble, if all would be particular to give their post office address and name, when writing to this office. We have letters (some inclosing money) that have no name, post-office, County or State.—Also, if you live near one postoffice and get your mail at another, be sure to give the address we have on our list.

Premiums.—Those who get up clubs for the Weekly BEE JOURNAL for 1882, will be entitled to the following premiums:

For a Club of 2, —a copy of "Bees and Honey,"
" 3, —an Emerson Binder for 1882.
" 4, —Cook's (Bee) Manual, paper.
" 5, —" " " cloth.
" 6, —Weekly Bee Journal for 1 year.

We have a SPECIAL EDITION of the Weekly BEE JOURNAL, just as it will be published in 1882 (16 pages), for distribution at Fairs, Conventions, etc. Any one who may desire to distribute them to bee-keepers will be supplied free, in any quantity they may be able to judiciously use.

Honey and Beeswax Market.

BUYERS' QUOTATIONS.

OFFICE OF AMERICAN BEE JOURNAL, Monday, 10 a. m., Sept. 18, 1881.

The following are the latest quotations for honey and beeswax received up to this hour:

CHICAGO.

HONEY.—The market is lively and prices steady. I have just purchased a car load of extracted at current prices.
We quote light comb honey, in single comb boxes, 18@20c; in larger boxes 2c. less. Extracted 16@18c.

BEESWAX.—Prime quality, 18@21c.
AL. H. NEWMAN, 972 W. Madison St.

NEW YORK.

HONEY.—The market is well supplied at present, but there is a large prospective demand.
We quote as follows: White comb, in small boxes, 15@18c; dark in small boxes, 12@15c. Extracted, white, 10@12c; dark, 7@9c.

BEESWAX.—Prime quality, 22@24c.
THORN & Co., 11 and 13 Devoe avenue.

CINCINNATI.

HONEY.—Is in good demand here now.
I quote: Good comb honey, in sections, is worth 14@16c, on arrival. Extracted, 7@9c, on arrival.
BEESWAX.—18@22c, on arrival. I have paid 25c. per lb. for choice lots. C. F. MUTH.

BOSTON.

HONEY.—Our honey trade has now fairly commenced, and we are selling quite freely. We find that one-pound combs are a very desirable package in our market, and a large quantity could be sold at 20@22c, according to quality.

BEESWAX.—Prime quality, 25c.
CROCKER & BLAKE, 57 Chatham Street.

CLEVELAND.

HONEY.—Comb honey continues in good demand at 20c. for 1 lb. white and 19c. for 2 lb. sections. Extracted honey, 10@12c.

BEESWAX.—18@20c.
A. C. KENDEL, 115 Ontario Street.

BALTIMORE.

HONEY.—But little on the market, and prices are not quoted.
BEESWAX.—Southern, pure, 21@23c.; Western, pure, 22c.; grease wax, 12@13c.—Baltimore Market Journal.

INDIANAPOLIS.

HONEY.—New, in 1 or 2 lb. sections, 22@25c.—Indianapolis Stock Review.

SAN FRANCISCO.

HONEY.—Sales of choice comb, to arrive, have been effected at 20c. for small lots. It is doubtful if an order for a large lot of choice comb could be filled in this market. Choice extracted, in barrels, is quoted at 9@10c.

We quote white comb, 16@20c.; dark to go, 10@14c. Extracted, choice to extra white, 9@10c.; dark and candied, 8c. BEESWAX.—22@25c.
STEARNS & SMITH, 433 Front Street.

ST. LOUIS.

HONEY.—Demand fair. New extracted, 7@9c.; comb 14@16c.
BEESWAX.—Prime yellow sells at 20@21c.
R. C. GREEN & Co., 117 N. Main Street.

PHILADELPHIA.

HONEY.—The supply and demand are alike nominal.
BEESWAX.—Best light 23@25c.—Philadelphia Merchants' Guide.

Local Convention Directory.

1881.	Time and Place of Meeting.
Sept. 27—Eastern N. Y. Union, Knowersville, N. Y.	N. D. West, Sec. Middlesex, N. Y.
29—Southwestern Iowa, near Corning, Iowa.	W. J. Oliver, Sec.
Oct. 4—Eastern Michigan, at Detroit, Mich.	A. B. Weed, sec., Detroit, Mich.
5—Southeastern Mich., at Ann Arbor, Mich.	
5—National, at Lexington, Ky.	Dr. E. Paruly, Sec., New York City.
12—Kentucky State, at Louisville, Ky.	
11, 12—Northern Michigan, at Maple Rapids.	O. K. Goodno, Sec., Carson City, Mich.
11, 12—Northeastern Wis., at Pewaukee, Wis.	Frances Dunham, Sec., DePere, Wis.
12—Central Ky., in Exp. B'dg., Louisville, Ky.	W. Williamson, Sec., Lexington, Ky.
18—Rock River Valley, at Monroe Center, Ill.	D. A. Clipperty, Sec., Monroe, Ill.
20—Union Kentucky, at Shelbyville, Ky.	G. W. Demaree, Sec., Christiansburg, Ky.
25, 26—Northwestern District, at Chicago, Ill.	C. C. Coffinberry, Sec., Chicago, Ill.
27—Central Michigan, at Lansing, Mich.	George L. Perry, Sec.
27—Western Mich., at Berlin, Mich.	Wm. M. S. Dodge, Sec., Coopersville, Mich.
Nov. 30—S. W. Wisconsin, at Platteville, Wis.	N. E. France, Sec., Platteville, Wis.
1882.	
Jan. 10—Cortland Union, at Cortland, N. Y.	C. M. Bean, Sec., McGrawville, N. Y.
25—Northeastern, at Utica, N. Y.	Geo. W. House, Sec., Fayetteville, N. Y.
April 11—Eastern Michigan, at Detroit, Mich.	A. B. Weed, Sec., Detroit, Mich.
27—Texas State, at McKinney, Texas.	
May — Champlain Valley, at Bristol, Vt.	T. Brookins, Sec.

In order to have this table complete, Secretaries are requested to forward full particulars of time and place of future meetings.—ED.

ELECTROTYPES

Of Engravings used in the Bee Journal for sale at 25 cents per square inch—no single cut sold for less than 50c.
THOMAS G. NEWMAN,
974 West Madison Street, Chicago, Ill.

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Assorted samples of the four sizes, put inside one another as a nest, price 50 cents. These pails are very useful for many other purposes, after being emptied of the honey by consumers. The following are the prices:

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Gallon, holding 10 lbs. of honey....	\$1.80....	\$12.00
Half Gallon, " " " " " " " "	1.50....	9.00
Quart, " " " " " " " "	1.20....	7.50
Pint, " " " " " " " "	.75....	4.00

ALFRED H. NEWMAN,

972 West Madison Street, Chicago, Ill.

The British Bee Journal,

AND BEE-KEEPER'S ADVISER.

The British Bee Journal is published monthly at \$1.75, and contains the best practical information for the time being, showing what to do, and when and how to do it. C. N. ABBOTT, Bee Master School of Apiculture, Fairbairn, Southall, London.

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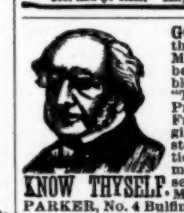
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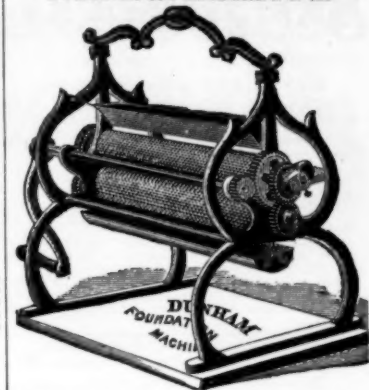
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SEND POSTAL for my 12-page circular price list of Italian, Cyprian and Holy Land Bees, Queens and Apian Supplies.
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15 One-Cent Stamps

Will pay for our exhaustive pamphlet on raising, handling and marketing extracted honey.

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THE AMERICAN BEE JOURNAL

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974 West Madison Street, Chicago, Ill.

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It will pay to devote a few hours in getting up a club for the BEE JOURNAL. Read the list of premiums on another page, and take advantage of the fall gatherings to get up clubs.

Double-Boarded Langstroth Hives.

A few good colonies of Cyprian, Holy Land, Hungarian and Italian bees for sale in the above hives. They require the least lumber and labor in their construction of any hive in use—best hive for winter. Send for price list.

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37W38

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34W132

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35W17

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